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61 agcgggcgtg aaggcgcgag 10 ctgaacgcgtc gcacggttt ctagatctaa aagaaaggcc
121 gagttagat acccttcaa 11 AATGGCTGCT ATTAAGGAAG AGAGAGAGGT CGAAGATTAC
181 AAGAAAAAA GGAAGACGAT 12 CAGCACAGGC CATGAGCCTA AGGAGCCAGA GCAGTTGAGA
241 AACGTGTTCA TTGGAGTCT 13 GACCTTCGAG ACCAGGGAT ATAGCTTGAG ACAGCACTTT
301 GAAAATGGG GCACACTCAC 14 GGACTGTGTC GTGATGAGAG ACCCACAAAC AAAACGTTCC
361 AGAGGCTTTG GCTTGTTC 15 TTACTCTTGC GTGGAAGAGG TGGATGCGGC CATGAGCGCT
421 CGACCACATA AGGTGGATGG 16 ACCTGTGGTT GAACCAAAGA GACCAGTTTC AAGGGAGGAT
481 TCTGTAAAGC CTGGGGCCA 17 TCTCACAGTA AAGAAAATAT TTGTGTTGTTG CATTAAAGAA
541 GATACAGAAAG AAATAAATTT 18 AAGGGGGTAC TTTGAAACAT ATGCCAAGAT CGAAACGATA
601 GAAGTCATGG AAACAGACAA 19 AAAGTGGAAAG AAAAGAGGCT TCCTTTTGT AACTTTGAT
661 GATCACGATA CAGTTGATAA 20 ATATGGTGT CAGAAATAC ATACTATAAA TGTCATAAAC
721 TGCGAAGATA AAAAAGCACT 21 CTCAAAACAA GAGATCGAGA CTGCGAGCTC TCAGAGAGGT
781 CGTGGGGGTG GTTCAGGCAA 22 CTTCATGGGT CGTGGAAATT TTGGAGGTGG TGGAGGAAAC
841 TTTGGCCGAG GAGGAAACTT 23 TGGTGGAAAGA GGAGGCTATG GGGGTGGTGG TGGCGGTGGT
901 GGGAGCAGAG GAAGCTTGG 24 GGGTGGTGTAT GGATACAAAG GATTTGGTGA TGGTGGCAAC
961 TATGGAGGTG GTCTCTGCTA 25 TGCCAGCAGA GGGGGTTATG GTCTGTGGTGG AGGACCAGGA
1021 TATGAAACCTT CAGGTGGTGG 26 ATATGGAGGT GGAGGGAGG GATATGGTGG CTACAATGAA
1081 GGAGGCAATT TTGGAGTGG 27 TAATTATGGA GGCAGTGGAA ACTACATGAA CTTTGGTAAC
1141 TACAGTGGAC AGCAGCAGTC 28 CAATTACGGT CCCATGAAG GTGTTGGCAG TTTTGGTGGT
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1261 GGTGGTAGAA GATTCTaaaa 30 atgctaccag aaaaaggct acagtctta gcaggagaga
1321 gagcggaggag ttgtcaggaa 31 agctgcaggat tactttgaga cagtcgtccc aaatgcatta
1381 gaggaaactgt aaaatctgc 32 acagaaggaa cgatgtatcca tagtcagaaa agttactgc
1441 gctttaaacag gaaacccctt 33 ttgttcaggaa ctgtcatgc cacagtttgc aaaaagagca
1501 gctattgggt aatgtcaatgt 34 agtgcgtta gatgtacatc ctgaggctt tatcttgtt
1561 agcttgcgtt ttctttttc 35 tttttatcccattacat caggttatatt gccctgtaaa
1621 ttgtgttagt ggtaaccaggaa 36 ataacaat taaggaattt ttggctttc aaaaaaaaaaa
1681 aaaaaaaaaa

Fig. 1α

CHKA1	- MAAIKEEREVEDYKRKRKTISTGHEPKPEQLRKLFIGGLS FETDDSLR	- 50
HUMA1	- M-----SKSESPKPEQLRKLFIGGLS FETTDESLR	- 31
CHKA1	- <u>E</u> OFEKWGTL <u>T</u> DCVVMRDPQT <u>K</u> RSGFGFV <u>T</u> YSCVEVDAAMSRPHKVDG	- 100
HUMA1	- SHFBQWGTL <u>T</u> DCVVMRDPNT <u>K</u> RSG <u>G</u> FGFV <u>T</u> YATVEVDAAMNARPHKVDG	- 81
CHKA1	- RVVEPKRAVSREDSVKPGAH <u>L</u> TVKKI <u>F</u> VGGIKEDTEEYNLRGYFETYGKI	- 150
HUMA1	- RVVEPKRAVSRED <u>S</u> QRPGAH <u>L</u> TVKKI <u>F</u> VGGIKEDTEEHHLRDYFEQYGKI	- 131
CHKA1	- ETIEVMEDR <u>Q</u> SGKK <u>R</u> GF <u>A</u> FVT <u>F</u> D <u>D</u> HDTVDKIVVQKYHT <u>I</u> NGHN <u>C</u> EDKKAL	- 200
HUMA1	- EVIEIMTDRGSGKK <u>R</u> GF <u>A</u> FVT <u>F</u> D <u>D</u> HDSVDKIV <u>Q</u> KYHTVNGHN <u>C</u> EVRKAL	- 181
CHKA1	- SKQEMQTASS- <u>Q</u> RGRGGGS <u>G</u> NFMGRGN <u>F</u> GGGG----- <u>N</u> FGRGGN <u>F</u> GG	- 242
HUMA1	- SKQEMASASSSQ <u>R</u> GR <u>S</u> GS----- <u>G</u> N <u>F</u> GGGRGG <u>F</u> GGND <u>N</u> FGRGGN <u>F</u> SG	- 224
CHKA1	- RGGYGGGGGGGGSRGS <u>F</u> GGGD <u>D</u> G <u>Y</u> NG <u>F</u> GGNYGG <u>P</u> GY <u>G</u> S <u>R</u> GGYGGGGP	- 292
HUMA1	- RGG <u>F</u> GGGS <u>R</u> GGGG <u>Y</u> GGS--- <u>G</u> D <u>Y</u> NG <u>F</u> GND <u>G</u> S-----	- 252
CHKA1	- GYGNPGGGYGGGGGGYGGYNE <u>G</u> GN <u>F</u> GGNYGG <u>S</u> GN <u>Y</u> ND <u>F</u> GN <u>Y</u> SG <u>Q</u> QQSNY	- 342
HUMA1	- ----- <u>N</u> F <u>GGGG</u> S <u>Y</u> ND <u>F</u> GN <u>Y</u> NN <u>Q</u> S-SNF	- 273
CHKA1	- GPM <u>K</u> GGGS <u>F</u> GGRS <u>S</u> GP <u>Y</u> GGG----- <u>Y</u> GS <u>G</u> S <u>G</u> GGY <u>G</u> -GR <u>RF</u>	- 378
HUMA1	- GPM <u>K</u> GG- <u>N</u> F <u>GGR</u> S <u>S</u> -PY <u>GGGG</u> Q <u>Y</u> FA <u>K</u> PR <u>N</u> Q <u>GGY</u> GG <u>SSSS</u> YY <u>G</u> S <u>GR</u> RF	- 320

Fig. 1b

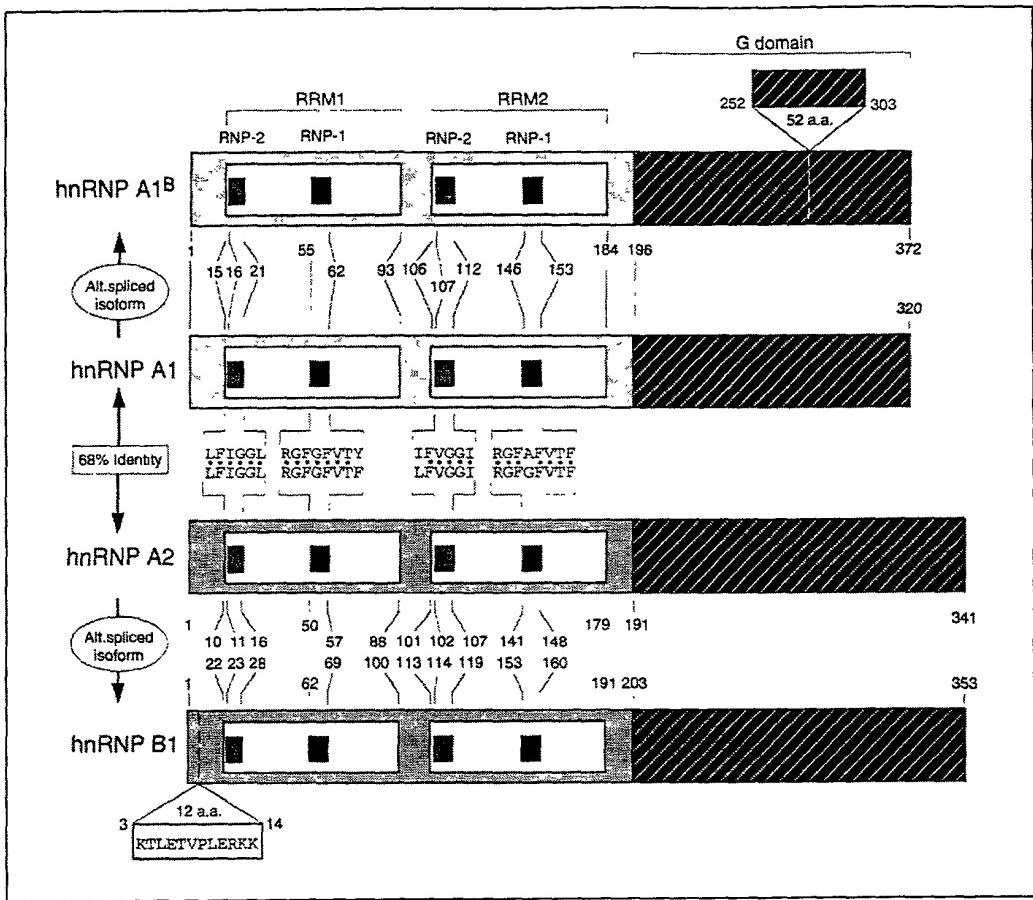


Fig. 2

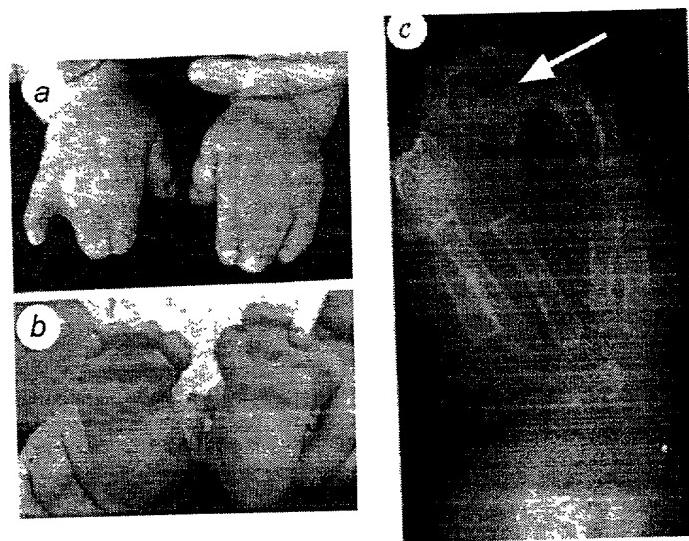


Fig. 3

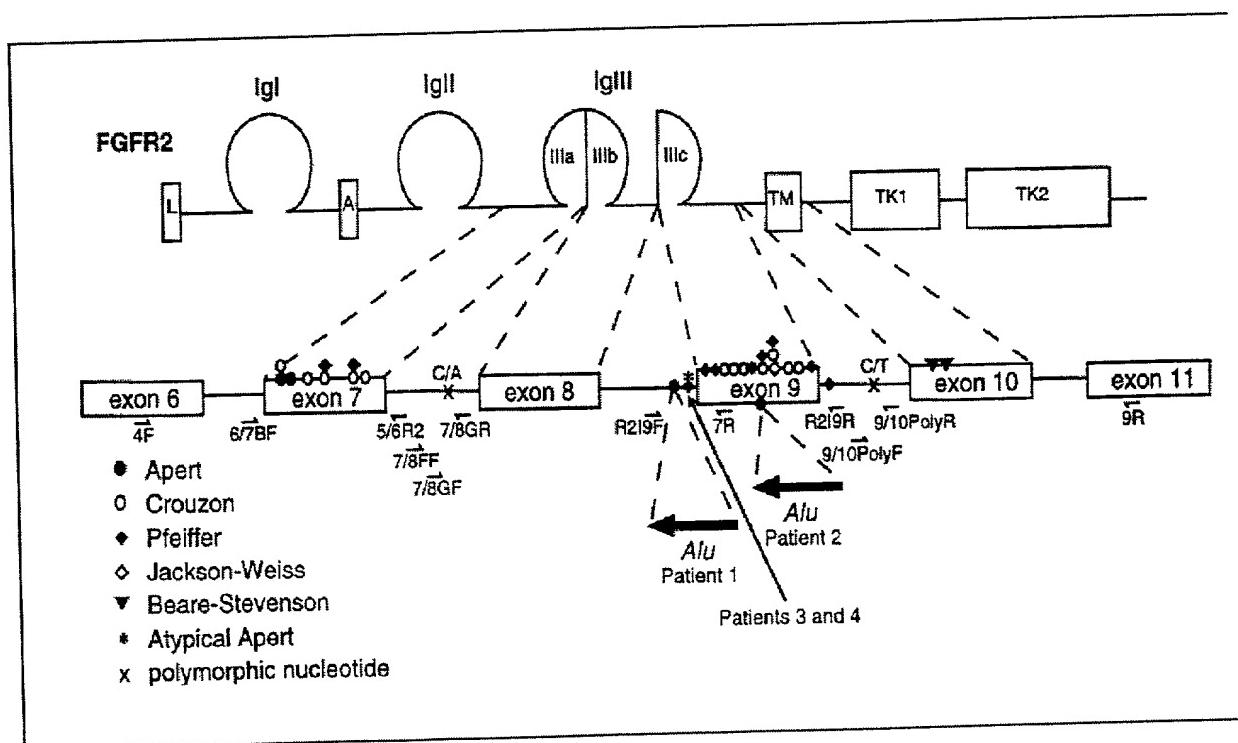


Fig. 4

Fig. 5

